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SCHWARZ et al.(10) **Pub. No.: US 2019/0302879 A1**(43) **Pub. Date: Oct. 3, 2019**(54) **VIRTUAL REALITY FLOOR MAT ACTIVITY REGION**(71) Applicant: **Microsoft Technology Licensing, LLC**,
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ABSTRACT

A virtual reality experience is provided to one or more users by a computing system through the use of a special-purpose virtual reality mat. The computing system receives image data from an optical sensor imaging a physical environment. The mat includes one or more fiducial markers that are recognizable by the computing system. A presence of these fiducial markers is detected based on the image data. An activity region within the physical environment is defined based, at least in part, on the detected fiducial markers. A positioning of a physical subject is identified within the physical environment relative to the activity region. The virtual reality experience is selectively augmented based on the positioning of the physical subject identified relative to the activity region.

